

SECTION I—SPECIFICATION AMENDMENTS

Please amend the specification as indicated below:

1. Please replace the paragraph beginning at page 2, line 3, with the following amended paragraph:

During operation of the FBAR array, a signal is input to each of the FBARs 104. As a result, heat is generated in the piezoelectric area and the active area experiences a temperature rise. The only means by which the thermal energy can be transferred away from the active areas is laterally through the membrane, as illustrated by the arrows in the figure. The thermal energy travels through the membrane 102 and is dissipated into the supports ~~[[114]]~~ 112. Since the center of the membrane is farthest from the supports ~~[[114]]~~ 112, the thermal energy generated by an FBAR at or near the center of the membrane dissipates more slowly and that area experiences a greater temperature increase. For FBARs closer to the edge of the membrane (and thus closer to the supports) the heat dissipates more quickly and the temperature increase experienced by these FBARs is substantially lower. In applications in which a substantial amount of power is input to the FBAR array (e.g., transmission applications in which the power input can exceed 1 W), the temperature rise at the center of the FBAR array can exceed 100 degrees. Such large temperature rises can shift the resonant frequency of the FBAR out of specification, and in some cases can damage the FBAR array and render the entire thing useless.

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